

FIRE MARSHAL COMMAND



photo by Matt Milam

Interim
Fire Marshal
Michael Ivy

Life Safety
Bureau

Fire
Investigation

Code
Enforcement

"As the Interim Fire Marshal of the Houston Fire Department, part of my responsibilities include overseeing the daily administrative and field operations of the Life Safety Bureau and the Fire & Arson Investigation Division, of the fourth largest city in the United States.

We hope that the information provided in this report provides insight to not only the functions of inspection personnel who conduct fire and life safety inspections and public education programs, but also functions of the investigation personnel that investigate fire scenes for fire cause determination and fire deaths as part of potential criminal investigations.

Our intentions and focus are to be a world-class showcase and leaders in the science of fire and life safety and fire investigations."



Eddie Corral
(Retired 2005)

Born on July 4, 1931, in Chicago, Illinois, Chief Edward Anthony "Eddie" Corral, grew up in Houston, Texas. A patriotic American, he served in the United States Air Force, achieving the rank of sergeant; he remained in the reserves for 11 additional years.

In 1956, Chief Corral began his career as a firefighter with the Houston Fire Department. He was assigned to former Mayor Louie Welch's staff for a special assignment. He implemented summer jobs and recreation programs for Houston youths. After his return to fulltime duty with HFD, he promoted to Fire Marshal in 1981.

On March 25, 1992, Houston Mayor Bob Lanier appointed Fire Marshal Eddie Corral to serve as the first Hispanic Fire Chief of the Houston Fire Department. He gained recognition for his ambitious new approaches to fire safety and prevention and development of the Juvenile Firesetters Prevention Program. He made fire prevention and education a top priority for our nation's fire departments, as he strongly believes that "fire prevention is the key to fire protection."

Chief Corral has received recognition and accolades from the Texas House of Representatives, where the 73rd Texas Legislature proudly saluted him with an official resolution. President George H. Bush, President Ronald Reagan, Governor William P. Clements, Jr. and Governor Dolph Briscoe have also honored him personally. Chief Corral has won honors from the Mexican-American Bar Association of Houston, the Texas Advisory Council on Arson and many other individuals and organizations.

Chief Corral is a devoted husband and father who enjoys a rewarding marriage with Rima, his wife of more than 40 years, and who takes great pride in the accomplishments of his two sons, Robert and Eddie, Jr.

After a long and distinguished 50-year career, Chief Edward Anthony "Eddie" Corral, retired from the Houston Fire Department. He leaves a legacy of caring, commitment and dedication to serving the citizens of Houston that will be difficult, if not impossible, to challenge or surpass.

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Life Safety Bureau 2004-2005

The Life Safety Bureau (LSB) is a division of the Fire Prevention Command under the direction of the Fire Marshal. The Assistant Fire Marshal is responsible for managing the daily administrative functions of the LSB, along with overseeing fire and life safety code enforcement functions.

LSB personnel operate with 113 classified inspection personnel and eight civilian support personnel. This command is responsible for the following:

- Conducting fire and life safety inspections in all types of occupancies
- Conducting public fire safety education campaigns
- Enforcing the Fire Code and other related city ordinances
- Inspections for, and approvals of, Fire Prevention Permits and Fire Marshal's Approvals
- Plan review and approval of fire protection and fire alarm systems
- Creation, revision, and implementation of Fire Code Standards and Operating Guidelines
- Data and information management
- Interaction with other governmental agencies



The "Houston Fire Department Standards" are important code enforcement supplements to the Fire Code, when required by the Fire Marshal, to regulate certain specific events, processes or hazards such as trench burning, pyrotechnics and liquefied petroleum gas storage and use. The Fire Code gives the Fire Marshal discretionary authorization to create or modify such standards as deemed necessary to meet the intent of the Fire Code.

The LSB is organized into 17 individual teams that address fire and life safety issues in all types of occupancies. The LSB operates through the authority of the Fire Chief and under the direction of the Fire Marshal in the enforcement of the "International Fire Code," 2000 edition (Fire Code) with the "City of Houston Amendments".

The 17 inspection teams are divided into seven General Inspection Teams and 10 specialized inspection teams. Special teams consist of FAST, Institutions, Highrise, Haz-Mat/High Piled, Nights, Weekends, Public Education, Special Operations, Plan Checking Review and Plan Checking Field Inspections. Each team of inspectors is trained to inspect a specific high-priority occupancy type and is under the direction of a Chief Inspector and a Senior Inspector who function as field supervisors. The number of inspectors assigned to each team is designed to provide adequate staffing with the intent to reach an overall goal of inspecting high-priority occupancies annually.

Current classified staff: one Fire Marshal, one Assistant Fire Marshal, seven Chief Inspectors, 15 Senior Inspectors, 99 Fire Inspectors

Current civilian staff: one Clerical Supervisor, one Executive Secretary, one Senior Secretary, one Secretary, three Administrative Aides one Receptionist

ADMINISTRATIVE STAFF SERVICES provides logistical & technical support for the LSB. These support services include payroll, records management, citizen's assistance, tracking and managing the progress of fire prevention permits, Fire Marshal's Approvals, the strategic plan, accreditation documents and updates, management reviews and annual reports.

THE GENERAL INSPECTION TEAM was formed as a result of a major reorganization in August 2001, allowing the LSB to refocus on priorities involving fire and life safety inspections. The city was divided into four geographical sectors and parts of the LSB's special teams were redirected to cover a broader spectrum of occupancies. Assigning geographical inspection districts by zip code and combining inspection responsibilities virtually eliminated overlapping inspections. This team conducted fire and life safety inspections in over 600 public and private schools and more than 75 shopping malls and related retail complexes.

HAZARDOUS MATERIALS INSPECTION TEAM members and their Chief and Senior Inspectors enforce the Fire Code in chemical and high-piled storage warehouses.

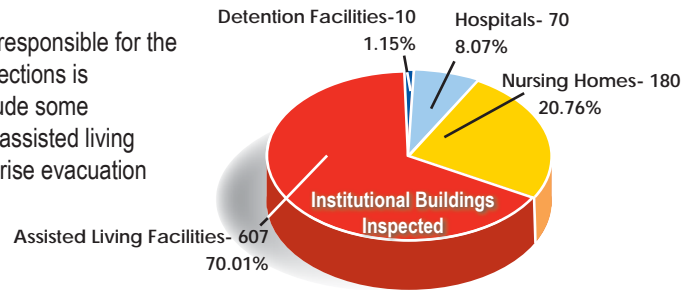


Originally formed at the request of the Houston City Council in November 1995, in response to the Houston Distribution Warehouse fire, this team has made major accomplishments in the regulation of storage and use of hazardous materials in the warehouse industry. Team members have received specialized training in hazardous materials code enforcement from the International Fire Code Institute. The team has a commendable reputation as being extremely knowledgeable in this field and is often consulted by other jurisdictions, including the Houston Police Department's Major Offenders Division and the Texas Commission on Environmental Quality. Their current operation has been expanded to include plan reviews of all proposed hazardous material and high-piled storage facilities.

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THE HIGH-RISE TEAM provides fire and life safety inspections in high-rise office buildings that are 75 feet or higher and encompasses a group of fire inspectors that conduct high-rise evacuation certification training for approximately 498 high-rise buildings in the City of Houston.

Similar to the High-Rise Team, **THE INSTITUTIONAL TEAM** is also responsible for the inspection of buildings in excess of 75 feet. The focus of this team's inspections is the 867 institutional buildings in the City of Houston. These buildings include some 70 hospitals (requiring two yearly inspections), 180 nursing homes, 607 assisted living facilities and 10 detention facilities. Additionally, they must conduct high-rise evacuation certification training for institutions that meet high-rise building criteria.



THE PUBLIC EDUCATION TEAM presents programs and activities to a variety of audiences including school children, homeowners, pre-schoolers, apartment dwellers, handicapped and senior citizens. One of the most popular fire and life safety demonstrations is performed with the Mobile Safety Trailer (MST). The MST averages about 196 demonstrations per year, conducted at public and private schools and special events. The MST is an excellent tool to teach children about home fire safety and escape routes.



THE PLAN CHECKING TEAM is responsible for plan reviews and conducting field inspections involving fire alarm systems, automatic sprinkler systems, standpipe systems and flammable and combustible liquid storage tanks. During 2004 and 2005, the Plan Checking office reviewed 14,201 plans and 12,862 field inspections were logged involving fire protection systems and flammable and combustible liquid storage tanks. These figures include many high profile venues such as the Toyota Center, the conversion of the Compaq Center to Lakewood Church and Bush Intercontinental Airport.

THE SPECIAL OPERATIONS TEAM was organized in April 2002 to conduct inspections for special assembly occupancies such as the airports, convention centers, professional sports stadiums, haunted houses and dangerous buildings. Also, all special permits such as liquefied petroleum gas use, pyrotechnics, trench burning, festivals, tents and roofing operations are inspected and approved by this team when compliance with the code has been achieved. During its short existence, the team has been cross-trained to handle all special inspections and provide code enforcement.

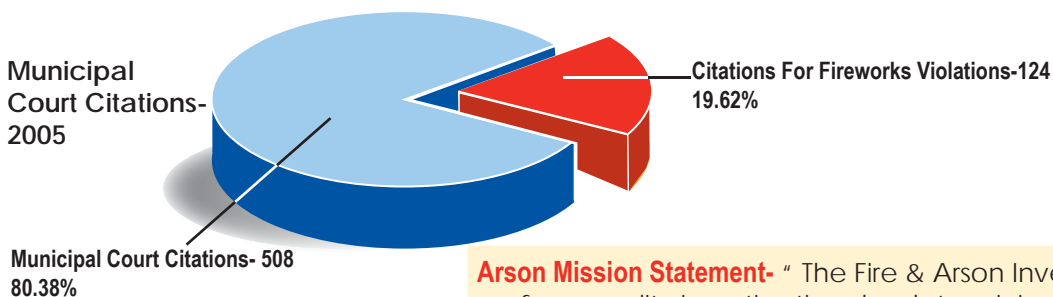
THE NIGHT TEAM is on duty from 1600 to 0200 hours, Monday evening through Saturday morning, holidays not included. **THE WEEKEND TEAM** is on duty from 2400 hours Friday evening through 0700 hours Monday morning, with an 8-hour break between the 40-hour shift. Both teams are primarily responsible for inspecting public assemblies and handling special complaints.

Some of the major accomplishments of the LSB include:

- Assisted the Texas Commission on Fire Protection by providing a staff member to serve on an ad-hoc committee to revise the Fire Inspector's Certification Curriculum
- Completed Phase I and began Phase II of the Integrated Land Management System (ILMS) database and began testing the system on a limited basis. The ILMS is administered by the City of Houston Planning Department. It contains physical information about structures and the real estate property on which they are built.
- Facilitated and completed the transfer of the administration of Combustible Waste Storage Permits to the City of Houston Solid Waste Department
- Implemented a "False Alarm Task Force" to address the increasing number of false fire alarms being signaled in the Texas Medical Center area
- As a result of a deadly high-rise fire in Chicago, all high-rise buildings in the City of Houston were surveyed to ensure compliance with the city's five-floor re-entry mandate
- Co-authored a mandate with the City of Houston Building Department that established re-entry to the highest occupied floor, unless it is a residence, from the stairwell in all high-rise residential buildings
- Posted warning placards on and legally forced the closure of six businesses, including two schools, one church, one nightclub, one residential property and one daycare that were deemed unsafe according to the Fire Code because of potential life threatening hazards
- Successfully developed and implemented an automatic fire sprinkler retrofit ordinance for all high-rise buildings located in the City of Houston
- In 2005, issued over 632 municipal court citations for Fire Code violations, 124 of which were fireworks related violations. Minimum fine is \$500.00 per occurrence

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- Conducted 46,571 fire and life safety inspections, January through December in 2005
- Developed and implemented the Permit Compliance Group (PCG), a group of civilian HFD employees, who visit various prioritized occupancy types for fire permit compliance. The PCG generated approximately \$1.4 million dollars in uncollected permit revenue during FY05.
- Assisted the auditors from Mir, Fox and Rodriguez, as they conducted a performance audit that identified the strengths and weaknesses of the LSB. Positive changes have resulted in response to the recommendations of the auditor's final report.
- First-time implementation of a New Year's Eve Fireworks Detail for the city and areas of limited annexation. The Fire Code prohibits the possession, use, storage or transport of fireworks within the Houston City limits. Maps delineating the city limits and limited annexation are posted on the HFD website.
- Conducted "Hazard Awareness Classes" for fire suppression personnel in an effort to help them identify Fire Code violations and to enhance a positive working relationship and a willingness to cooperate between suppression and inspection personnel



ARSON-

Arson Mission Statement- " The Fire & Arson Investigation Division strives to perform quality investigations by determining the origins and causes of fires and apprehending persons responsible when a crime has occurred."



The law enforcement agency of HFD is the **ARSON AND INVESTIGATION DIVISION**. This division responds in the event of incendiary fires, multiple alarm fires, fire deaths, bombings and criminal or terrorist activity associated with fires. These investigations require personnel highly trained in fire investigation, evidence collection and forensic photography. In many cases, investigators work with federal, state, and local agencies, such as the Bureau of Alcohol, Tobacco and Firearms (ATF), Federal Bureau of Investigation (FBI), and the Houston Police Department (HPD).

In 2004 the division responded to 1,613 fires with a projected total of 1,722 fires in 2005. One hundred eighty-three (183) of the criminal cases were referred to the Harris County District Attorney's Office or the Juvenile Firestoppers program for counseling. The division has 49 certified Fire Investigators working under the direction of the Chief Arson Investigator. All investigators are licensed peace officers certified by the Texas Fire Commission on Fire Protection and the Texas Commission on Law Enforcement Standards and Education (TECLOSE).

Many investigators receive training in crime analysis, interviewing and interrogation, fingerprint analysis and polygraph testing.



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The **CRIME LAB** receives daily submissions of evidence from field investigators as well as other departments within the State of Texas. The Crime Lab, recognized throughout the United States as a leader in the field of fire investigation, developed the technique for fingerprinting fire-damaged evidence. Crime lab Investigators also reconstruct fire scenes and prepare demonstrations for courtroom presentations.

The **POLYGRAPH DIVISION** has three certified examiners who use the polygraph as a means of developing leads and obtaining vital information from witnesses and suspects during arson investigations. Admissions of guilt have been obtained during interrogations using the skills of these examiners.

The **PHOTOGRAPHY SECTION** processes fire scenes, enhances photographs and prepares evidence for courtroom presentations. This forensic photographer also assists other areas of the fire department providing photos for training and public relations.

The **TASK FORCE UNITS** in this division participate with the Department of Homeland Security and on a joint task force with the ATF for the investigation of certain fires and bombings that may be related to hate crimes, domestic terrorism and businesses in violation of federal interstate commerce laws. The Department of Treasury has placed a specially trained canine in the division to assist in the detection of accelerants present in fire debris. The Accelerant Detection Canine Program (ACDP) is a part of the ATF National Response Team and travels throughout the country to major fires.